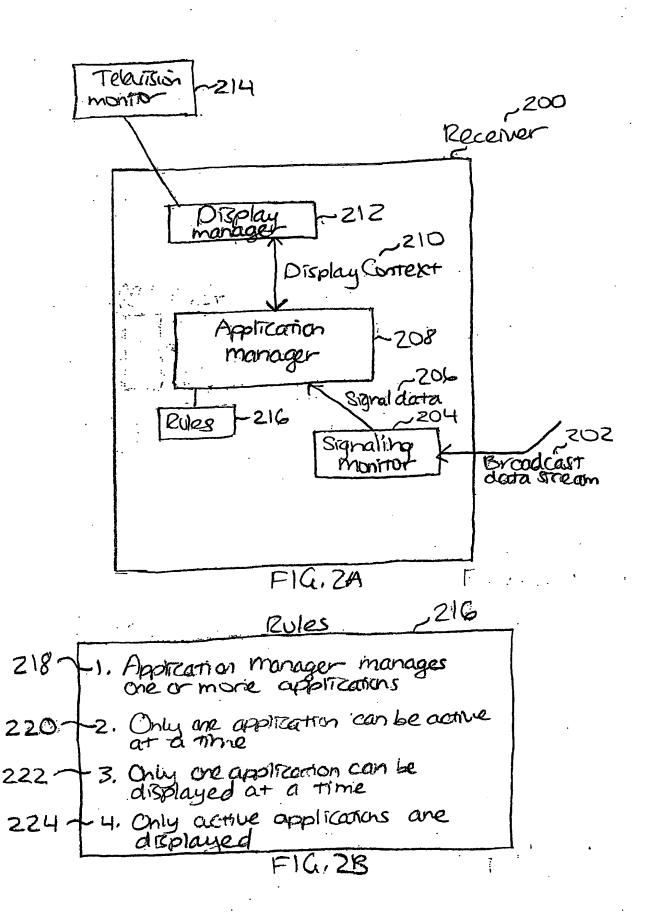


FIG. 1



7025 0 1

Signal Data ~302

App-present-in-data-stream; BULEAN -304 Locetion (e.g., directory, filename) -306 Authentication -308 Permissions -310

Application 208

400-80 0-400-0

Application context 1/5+ \sim 402

Application context 1 $\Delta \sim$ 404-A

Application context 2 $\Delta \sim$ 404-F1G, 4A

400-8 App3- \Rightarrow Application context 2 $\Delta \sim$ 404-F1G, 4A

400-0 App4- \Rightarrow Application context 4 $\Delta \sim$ 404-C

400-0 App4- \Rightarrow Application context 4 $\Delta \sim$ 404-C

Application Context A-404

Class loader identifier 406	
Stand data identifier 408	
Display conext identifier 410	
Application identifier 412	_
Application environment Object 41	土口
Current application state 416	2

FIG. 4B

TOPE &

Display List of display Context visible Context 2 102 Contex+3 103 Context 4 504 invisible FIG. 5A FIG. 5B Paused Application State 516 ~ ACIVE

D'Isplay store

Visible

FIG, 5C

Invisible

7023 : 25500 : 514

Application manager 602 Application Application manager calls 606 Application constants application active 604 Application Application poused Application manager of application sales rough uij 603 Application manager Application marager or application Application application calls 0115Cdestro destroyed Charry Idestroyed)

FIG. 6

Application Programming Interface (API)

Interface application { 706

704 ~ public Void init application (Application environment env)

708 ~ public void start application ()

710 ~ public void pause application (budean unconditional);

712 ~ public void destroy application (budean unconditional);

713 ~ public void destroy application (budean unconditional);

Applicationenummarimerface

Interface Application-environment {

804 ~ public world desinged();

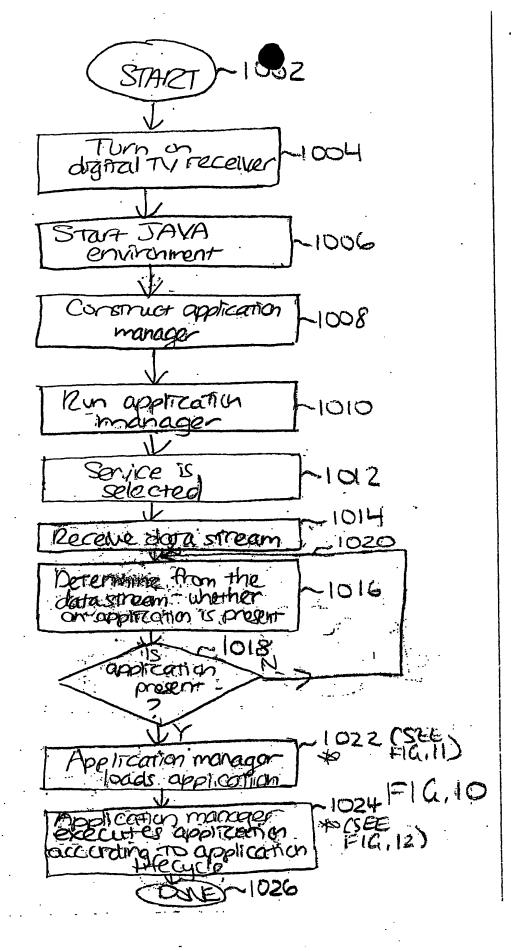
808 ~ public java.long.obje + genproserry (stringle)

806 ~ public void paused();

812 ~ public void resumer equest ();

FIQ. 8

Application - 102 Manager	Application
Call intrapplication () -	≥ ~ 906 > ~908
Call destroy application () -	7~910
Call Pause application () -	>~912
914 ~ Applications	invivonment application Paused()
916 ~ < Application-er	vironment application destroycol()
918 ~ Application-	environment resume request() -
920 ~ Application-	environment. getproperty ()



TOPS 75' 36500' (

@ 1022 olication, er loods -1102 application Recove Signal dora 1106 Application manager creates class louder for the application -1108 Clauses are laded ura the class lander -1110 Circute instance of explication = POTENTIAL STATE -1114 and its walker attenthoanceopr -1116 DIPARTON CO-SET remonvembly mon -1118 rittalize the

FIG, ST

TOPS

C 1024 Application manager executes 1202 Application waits to 1204 J206 Application manager (SEE FIG.13) changes the application STATE TO Palife 1208 propolication manager charges the applications state to active 1210 1212 Application or application manager lization manage changes The application state Confun State no sauseo 1214 Class Lader unisads clases -1216 Application released

F16,12

TOPS (3)

Application manager
Calls marappication
and masses it the application environment object to initialize

The Paused State 1308

FIG. 13

MORE A

C1208 1402 New program begins or the television's remove 1404 he application manager plication for the application tower cally starts) Application manager Strict application 1406 method for the application Application performs service and enters 1408 Active state

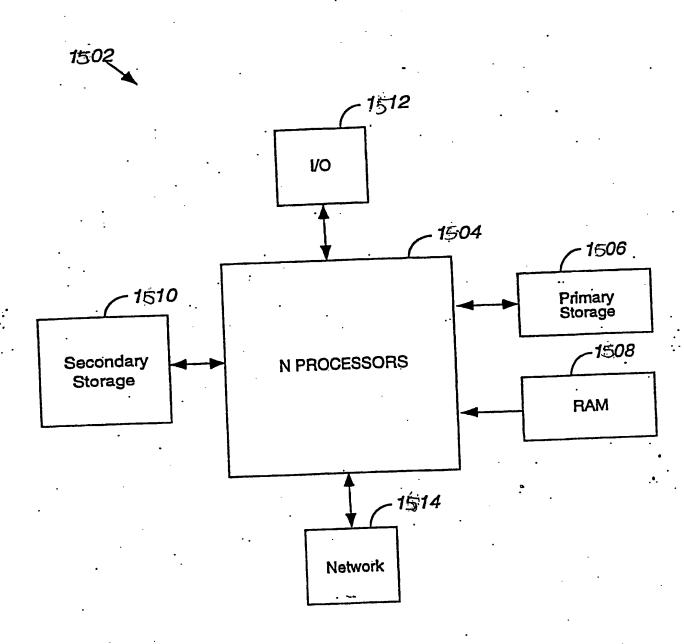


Figure 15.